



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,214	08/25/2003	Karl Allen Dierenbach		9036
7590	04/07/2004			
Karl Allen Dierenbach #100 232 McCaslin Blvd. Louisville, CO 80027			EXAMINER LINDINGER, MICHAEL L	
			ART UNIT 2841	PAPER NUMBER

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,214	<b>Applicant(s)</b> DIERENBACH, KARL ALLEN	
	<b>Examiner</b> Michael L. Lindinger	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaut U.S. Patent No. 5,602,803 in view of Hartwig U.S. Patent No. 3,668,858. Chaut teaches a apparatus for a display of time comprising a clockwork 21, said clockwork having an output shaft driven at an angular rate (not explicitly numbered), a drive wheel 52 attached to the drive shaft, a first rigid member 14 with an inner annular surface (outer annular surface embodiment taught in Col. 5, lines 55+; Col. 6, lines 1+; FIG. 7-10, wherein a support frame, which is not explicitly numbered is also taught) which is suspended by on one of said drive wheels and has a demarcation to represent the hour, said first rigid member with hour demarcation in contact with drive wheel so as to rotate said first rigid member with hour demarcation once every twelve hours allowing the hour to be interpreted using traditional clock interpretation means, a second rigid member 104 with an inner annular surface (outer annular surface embodiment taught in Col. 5, lines 55+; Col. 6, lines 1+; FIG. 7-10, wherein a support frame, which is not explicitly numbered is also taught) which hangs on the drive wheel 52 and has a demarcation to

Art Unit: 2841

represent seconds using traditional clock interpretation means. The Chaut apparatus rotates a plurality of time indicators using a single driven gear 52. Further, Chaut teaches a driven gear 112 including two or more rigidly connected, or integrally formed portions of different diameters, with each of the portions to accommodate annular member 14, wherein the large diameter portion 20 can be used for a 12-hour display, and the smaller diameter portion 22 can be used in more slowly rotating setting for a 24-hour display, wherein the two displays may be effected on opposing faces of the same annular member (Col. 4, lines 25+; FIG. 2a-d). Wherein in all the embodiments of Chaut, Chaut teaches said clockwork having no manual means to rotate disks for time setting function, the time setting function being performed by the manual placement of the annular rings. Chaut does not explicitly teach multiple drive shafts and multiple drive wheels, as well as the rigid members being clear (transparent) to aid with clock interpretation means, wherein the rigid members may a disk. Hartwig teaches a clock comprising a plurality of clear (transparent) disks defining a minute demarcation 17, an hour demarcation 44, and a second demarcation 29 indicator, wherein the discs are of different diameter and include a plurality of saw-teeth to be driven by a gear wheel 57 (Col. 3, lines 55+; Col. 4, lines 1+; FIG. 11-12). It would have been obvious to a person skilled in the art at the time of the invention to not only adapt rigid members of the Chaut reference to be clear as taught by Hartwig to improve visual interpretation of clock display, but to also provide a plurality of drive shafts and drive wheels to control the said plurality of rigid members in order to provide the user with more control of manual setting the display. As stated earlier, Chaut teaches a driven gear comprising two

Art Unit: 2841

portions of different diameters capable of driving two indicator annular rings, wherein the rings would rotate at different speeds depending on the portion diameter size (FIG. 2a-d). Comparing FIG. 6e-f of the Chaut reference with FIG. 1-4 of the Applicant's invention, the clockwork and rings are both present, and by utilizing multiple drive shafts rotating at different angular rates, the rings may be corrected manually by a using much quicker by having individual access to each of the rings. Also, the transparent members (disks) as taught by Hartwig further illustrate that the method of "hiding" traditional hour, minute, and second hand indicators, instead utilizing disks rotating providing smaller marking on the outside to indicate a given time are well known in the art.

***Prior Art***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Creasy U.S. Patent No. 1,475,800 discloses a timepiece with means whereby time of day is determined without requiring the observation of the positions of the hour and minute hands with respect to the dial.
- Baker U.S. Patent No. 3,934,405 discloses a rotatable transparent disc second hand for a watch.
- Winter U.S. Patent No. 4,428,682 discloses a clock mechanism comprising a fixed ring defining an inner annular surface and an outer annular surface.
- Weiss U.S. Patent No. 4,726,000 discloses a timepiece including an hour and minute hands of different configurations.
- Truini U.S. Patent No. 5,359,578 discloses a timepiece for geometrically synchronized time indications.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael L. Lindinger whose telephone number is (572) 272-2106. The examiner can normally be reached on Monday-Thursday (7:30-6).

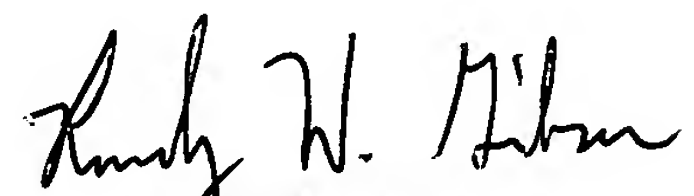
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (572) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael L. Lindinger  
Examiner  
Art Unit 2841

March 31, 2004  
MLL



**RANDY W. GIBSON**  
**PRIMARY EXAMINER**